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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/873,243	06/05/2001	Thomas H. Stockmann	A882688US	5963

7590 09/20/2006

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EXAMINER

KRUEER, STEFAN

ART UNIT	PAPER NUMBER
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3654

DATE MAILED: 09/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/873,243	STOCKMANN, THOMAS H.	
	Examiner	Art Unit	
	Stefan Krueer	3654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22 - 46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22 - 46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Examiners Comment

Claims 1 – 21 were previously incorrectly noted as withdrawn rather than cancelled in the Office Action Summary and Index of Claims of the previous prosecution. Corrections have been made accordingly.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 22, 28 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Mifsud (4,161,229).

Re: Claim 22, Mifsud discloses his positive displacement valve (22) comprising:

- a pair of longitudinally-moveable, spaced-apart pistons (300, 305),
- each piston operatively connected by a longitudinal shaft means (as in Fig. 3), so that the movement of one piston causes an equal movement of the other,
- each piston situated within a corresponding cylinder member (A, B),
- said cylinder members arranged in a juxtaposed relation to each other,
- said cylinder members having mutually opposes ends and an aperture (71, 77) proximate each of the opposite ends thereof so as to permit ingress and egress of pressurized hydraulic fluid,
- a piston phasing means (24) integral with cylinder member (A, B).

Re: Claim 28, Mifsud discloses:

- a platform member (2) having two opposite side edges,
- first and second hydraulic cylinders (5, 7) each having a piston member (302, 301) therein,

Art Unit: 3654

- said hydraulic cylinders operatively coupled to a side edge of said platform,
- a pump means (20, "hydraulic high pressure source" (Col. 4, Line 4) via a positive displacement means (22),
- said positive displacement means comprising:
 - a pair of longitudinally-moveable, spaced-apart pistons (300, 305),
 - each piston operatively connected by a longitudinal shaft means (as in Fig. 3), so that the movement of one piston causes an equal movement of the other,
 - each piston situated within a corresponding cylinder member (A, B),
 - said cylinder members arranged in a juxtaposed relation to each other,
 - said cylinder members having mutually opposite ends and an aperture (71, 77) proximate each of the opposite ends thereof so as to permit ingress and egress of pressurized hydraulic fluid,
- and a piston phasing means (24) integral with at least one of the cylinder members (A, B) of said positive displacement means.

Re: Claim 34, Mifsud discloses his positive displacement means, platform member, hydraulic cylinders, and pump means, as reviewed in Claim 22, as well as his piston phasing means (24) integral with both of the hydraulic cylinders.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 23 – 25 and 29 - 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mifsud in view of Gray (5,110,251).

Mifsud discloses his positive displacement valve having cylinder members, each having a longitudinal axis, and a piston phasing means integral to his positive displacement valve comprising a pair of apertures (80, 82...) spaced apart from each other on a longitudinal axis, yet the apertures are separate of the cylinder members.

Attention is directed to Gray who teaches his cylinder members (8, 10, Fig. 4) having integral piston phasing means (66) comprising pair of apertures (68, 70) in at least one of the cylinder members, spaced apart from each other on a longitudinal axis and proximate one end of at least one of his cylinder members, as a component of his inventive self-leveling feature. Furthermore, Gary teaches one (68) of the pair of apertures most proximate an end (34) of at least one the cylinder members (10) as larger in area than the other (70) of the apertures (Col. 6, Line 35), thereby enabling flow through the lower port(s) when the piston(s) is in its extended position to promote leveling of the pistons (Col. 7, Line 25).

It would have been obvious to one of ordinary skill in the art to modify the reference of Mifsud with the teaching of Gray to provide paired porting of the cylinders of the positive displacement valve, said porting having apertures of unique areas, to complement the piston phasing means of Mifsud for finer leveling characteristics.

Claims 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mifsud in view of Gray, as applied to Claim 23, and in further view of Colarelli et al (6,189,432).

Re: Claim 26, Mifsud is silent regarding check valves to avert reverse flow and Gray teaches his check valve (56) in combination with his restriction means (50) to afford either a controlled descent of his cylinders or avert reverse flow.

Further consideration is directed to Colarelli et al who teach their check valve (40) proximate their positive displacement valve (38) and in fluid communication with one of the pair of apertures for checking reverse fluid flow.

It would have been obvious to one of ordinary skill in the art to modify the reference of Mifsud and Gray with the teaching of Colarelli et al to promote phasing of the cylinders as well as maintaining elevated position(s) of the platform.

Claim 35 – 38, 40 – 43 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mifsud in view of Gray.

Re: Claims 35 - 37, Mifsud discloses his hydraulic cylinders (5,7) each having a longitudinal axis and a piston phasing means (24) integral to his hydraulic cylinders comprising a pair of apertures (80, 82...) spaced apart from each other on a longitudinal axis, the apertures being separate of the hydraulic cylinders.

Attention is directed to Gray who teaches his hydraulic cylinders (8, 10, Fig. 4) having a piston member (14) therein and an integral piston phasing means (66) comprising pair of apertures (68, 70) in at least one of his cylinders, spaced apart from each other on a longitudinal axis and proximate one end of at least one of his cylinders, wherein a one (68) of the pair of apertures most proximate an end (34) of at least one the cylinders is larger in area than the other (70) of the apertures (Col. 6, Line 35), thereby enabling restricted flow through the lower port(s) when the piston(s) is in its extended position to promote leveling of the pistons (Col. 7, Line 25).

It would have been obvious to one of ordinary skill in the art to modify the reference of Mifsud with the teaching of Gray to provide paired porting along the hydraulic cylinders, said porting having apertures of unique areas, to complement the piston phasing means of Mifsud for finer leveling performance.

Re: Claim 37, Mifsud is silent regarding check valves to avert reverse flow.

Gray teaches his check valve (56) in combination with his restriction means (50) to afford either a controlled descent of his cylinders or avert reverse flow.

It would have been obvious to one of ordinary skill in the art to modify the invention of Mifsud with the teaching of Gray to promote phasing of the cylinders as well as maintaining elevated position of the platform.

Re: Claim 40, Mifsud discloses his positive displacement means, platform member, first and second hydraulic cylinders, and pump means, as reviewed in Claims 22, as well as his piston phasing means (24) integral with both the cylinder members and hydraulic cylinders, as reviewed in Claims 22 and 34, respectively.

Re: Claims 41 – 46, Mifsud discloses as reviewed in Claims 23, 29 and 35, his piston phasing means (24) comprising a pair of apertures (80, 82...), spaced apart from each other on a longitudinal axis, yet separate one of the hydraulic cylinders (7) and cylinder members (A).

Gray discloses his piston phasing means (66) comprising a pair of apertures (68 70) in at least one of his cylinders (8, 10), spaced apart from each other on a longitudinal axis and proximate at least one end of the at least one of the cylinders, wherein a one (68) of the pair of apertures most proximate an end (34) of at least one the cylinders is larger in area than the other (70) of the apertures (Col. 6, Line 35), thereby enabling restricted flow through the lower port(s) when the piston(s) is in its extended position to promote leveling of the pistons (Col. 7, Line 25).

Furthermore, whereas Mifsud is silent regarding check valves to avert reverse flow, Gray teaches his check valve (56) in combination with his restriction means (50) to afford either a controlled descent of his cylinders or avert reverse flow.

In that the piston phasing means of Mifsud is integral to both his hydraulic cylinders and cylinder members whereas the piston phasing means of Gray is integral to his hydraulic cylinders for the provision of the synchronized/equalized flow of the instant invention, it would have been obvious to one of ordinary skill in the art to modify the reference of Mifsud with the teaching of Gray to afford a simplified flow scheme and reduction of major components, while maintaining the controlled ascent/descent and flow-averting features, for the benefits of performance and cost.

Response to Arguments

Applicant's arguments filed 29 August 2006 have been fully considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

Claims 25, 27, 31, 33, 37, 39, 44 and 46, considered allowable yet objected to as being dependent upon rejected claims of the previous office action, have herein been rejected on the merits of the new grounds of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tsymborov (5,012,898) and Bettin et al (4,665,031), and Kucera (4,655,031), are cited for references of control systems for hydraulically operable lifts incorporating phasing means for uniform travel of hydraulic cylinders of parallel operation and cylinders having piston phasing means comprising a pair of orifices in the cylinders, spaced apart from each other on a longitudinal axis and proximate at least one end of the at least one of the cylinders, wherein one of the pair of orifices adjacent the other most proximate the end of the cylinder incurs restricted flow, respectively.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Kruer whose telephone number is 571.272.5913. The examiner can normally be reached on M-F, 09:00 - 18:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on 571.272.6951. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866.217.9197 (toll-free).

SHK
11 September 2006



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